

Serial Number 08/954,821

IN THE DRAWINGS:

Please amend Figs. 1, 3, and 5 by correcting the lead lines for elements 121 and 122, and by shifting vertical line V, as marked in red on the copies of Figs. 1, 3, and 5 attached hereto for approval by the Examiner.

REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Rejection of Claims 1, 3, and 5-6 Under 35 USC §112, 1st Paragraph

a. Lead Lines For Elements 121 and 122

Figs. 1, 3, and 5 have been amended so that the lead lines for elements 121 and 122 more accurately point to the end edges of the lower plate 12.

It is respectfully submitted that the lead lines for elements 121 and 122 are now consistent with the same lead lines as illustrated in Figs. 2 and 4, and also with the original description of elements 121 and 122, thereby overcoming the objection set forth in the paragraph bridging pages 2 and 3 of the Official Action. As a result, it is respectfully submitted that the amendments to the lead lines for elements 121 and 122 do not represent **new matter**.

In addition, it is respectfully noted that the lead lines have been moved in direct and specific reply to the objections first raised in the final Office Action, and therefore do not raise **new issues**, are **necessary**, and yet **could not have been earlier presented**. Entry of the amendments is therefore respectfully requested.

b. Vertical Line V

Vertical line V has been moved so as to be consistent with the original description of the line as passing through the mark 24, thereby overcoming the objection set forth in the first complete paragraph on page 3 of the Official Action.

Serial Number 08/954,821

Again, since the drawings have simply been revised to be consistent with the original description, no **new matter** is involved.

In addition, since the line was moved in direct and specific reply to an objection first made in the final Office Action, it is respectfully submitted that the amendments to vertical line V do not raise **new issues**, are **necessary**, and yet **could not have been earlier presented**. Entry of the amendments is therefore respectfully requested.

2. Rejection of Claims 1, 3, and 5-6 Under 35 USC §112, 2nd Paragraph

This rejection has been addressed by specifying that the “end edge” is —one of a front end edge and a rear end edge—. As a result, it is respectfully submitted that the terminology used in the claims is exactly consistent with the language used in the specification.

Because the amendment is in direct and specific reply to a rejection first made in the final Office Action, it is respectfully submitted that the amendment to claim 1 does not raise **new issues**, are **necessary**, and yet **could not have been earlier presented**. Entry of the amendment is therefore respectfully requested.

3. Impropriety of final Office Action

Since the new rejections under 35 USC §112, 1st and 2nd Paragraphs could have been applied to the original claims and drawings, and are not responsive to any amendment, **the Official Action should clearly not have been made final**.

Therefore, even though entry of the above amendments is believed to be appropriate despite the finality of the Official Action, the Applicant respectfully also requests withdrawal of the finality of the Official Action and the granting of a new three-month shortened statutory period for response.

4. Rejection of Claim 1 Under 35 USC §102(b) in view of U.S. Patent No. 5,093,599 (Horng)

This rejection is respectfully traversed on the grounds that the Examiner has mis-read Fig. 2 of Horng. Contrary to the indication in the Official Action, sensor element 61 of Horng is not vertically aligned, along a direction parallel to the longitudinal axis of the axle tube, with an end edge of the lower polar plate as claimed. Instead, as shown in Fig. 2 of Horng, a sensor element positioned in groove 27 will be slightly removed from the end edge 43.

The copy of Fig. 2 to the right illustrates the different locations, groove 27 being colored red and end edge 43 being indicated in green.

The Examiner will note that the Horng patent is by the same Inventor as the present application. In fact, the present application is the result of recognition by the Inventor that if the sensor is *moved* to a position directly under an end edge of the lower polar plate, the end edge of the lower polar plate of motors such as the one disclosed in U.S. Patent No. 5,093,599 can be used as a reference to more accurately align the sensor and thereby ensure proper start-up of the motor.

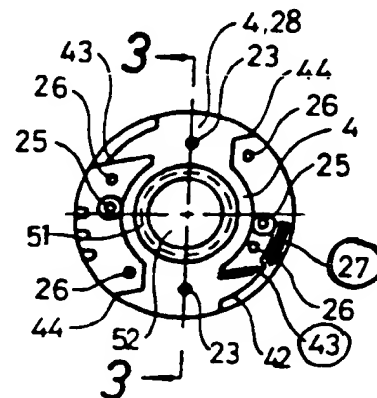


FIG. 2

Because Horng does not disclose all elements recited in claim 1, withdrawal of the rejection under 35 USC §102(b) is respectfully requested.

5. Rejection of Claim 1 Under 35 USC §102(b) in view of U.S. Patent Nos. 5,093,599 (Horng) and 4,773,829 (Vettori)

This rejection is respectfully traversed on the grounds that the Vettori patent, like the Horng patent, fails to disclose or suggest the claimed vertical alignment of the sensor element

Serial Number 08/954,821

and end edge of the lower polar plate. Instead, the polar plates of Vettori appear to be circular and therefore complete lack "end edges," much less the claimed vertical alignment.

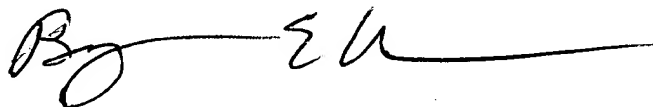
6. Rejection of Claim 1 Under 35 USC §102(b) in view of U.S. Patent Nos. 5,093,599 (Horng) and 5,010,263 (Murata)

This rejection is respectfully traversed on the grounds that the Murata patent, like the other references of record, fails to disclose or suggest the claimed vertical alignment of polar plate end edges and sensor element as claimed. To the contrary, Murata simply discloses a Hall element in a frame, with no disclosure of polar plates, coil seats, or any of the other elements of the claimed invention.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

BACON & THOMAS, PLLC



By: BENJAMIN E. URCIA
Registration No. 33,805

Date: March 10, 2000

BACON & THOMAS, PLLC
625 Slaters Lane, 4th Floor
Alexandria, Virginia 22314

Telephone: (703) 683-0500

NWB:S:\Producer\beu\Pending A...H\HHORNG954821\A01.wpd